Example 1 of the above-identified application and Comparative Example 4 for a 7.5-7.6μm film and for Tadayuki '268 and Tadayuki '063 for a 11.7-12.1μm film were calculated values. Examiners Higgins and Ruthkosky requested an explanation of how these values were calculated. An explanation of how these values were calculated is contained in the attached Declaration.

Specifically, as noted in the attached Declaration, the table below shows the data for pre-baked film thickness and Eth for applicants' current aqueous positive materials.

Table1. PBt vs. Eth for aqueous positive materials

Items	Unit	Product A		
PBt *1	um	7.1	11.4	12.9
Eth *2	mJ/cm^2	140	270	320

*1: Film thickness after pre- baking
*2: Threshold exposure energy for pattern opening

These data are plotted in Fig.1 below. As can be seen from Fig.1, Eth increases linearly by increasing pre-baked film thickness. There are good correlations between pre-baked film thickness and Eth when the data are approximated by linear function.

The composition of Product A (applicants' product) is almost same as the composition disclosed in Example1. If the compositions are almost same, the slope in the linear function and the correlation between film thickness and Eth will be almost same.

The polymer comprised in Product A is almost same as the polymer that is disclosed in Example1. The polymer in Product A is synthesized from 4,4'-dicarboxydiphenylether, 2,2-bis(3-amino-4-hydroxyphenyl)-1,1,1,3,3,3-hexafluoropropane and 3-aminophenol. Although there is a difference in the terminal group in the polymer between product A and Example 1, this difference does not affect the correlation between pre-baked film thickness and Eth.

The photosensitizer comprised in Product A is naphthoquinonediazidesulfonyl ester. It is same as the photosensitizer used in Example1.

The Adhesion promoter, dissolution inhibitor and solvent of Product A are different from Example 1, but this does not affect the correlation.

If the polymer and photosensitizer are almost same, the slope of the linear function would show almost the same trend.

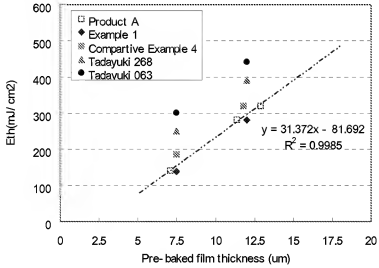

Fig1. Pre- baked film thickness vs. Eth

Mr. Ooe calculated the Eth for the different film thicknesses by using the equation 'Y= 31.372X – b'. The results are shown in Table 2 below.

Table2. The caluculated results of Eth

	Actual data		b*1	Calculated value	
	Film thickness (um)	Eth (mJ/ cm^2)		Film thickness (um)	Eth (mJ/ cm^2)
Example 1	12	280	- 96.464	7.5	139
Compartive Example 4	11.8	320	- 50.1896	7.5	185
Tadayuki 268	7.5	250	14.71	12	391
Tadayuki 063	7.5	300	64.71	12	441

*1: Calculated value from the equation Y = 31.372X- b

The calculated data are also plotted in Figure1. The calculated data show some small differences from the data presented in the interview with the Examiners.

In view of the foregoing comments and the attached Declaration, favorable reconsideration and allowance of all claims pending in the above-identified application are respectfully requested.

Applicants request any shortage in fees due in connection with the filing of this paper be charged to the Deposit Account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (case 1270.46327X00), and credit any excess payment of fees to such Deposit Account.

Respectfully submitted,

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